

Welcome to 40 years of waterproofing history in New Zealand and the Asia Pacific Region.

History has shown us that if a job fails, the root cause is often the membrane being laid on top of a badly constructed substrate. This general guide has been developed to assist builders to construct substrates which will function well beneath a Nuralite membrane system.

Being a guide, the project specifications take precedence over this checklist, so they should be consulted carefully before commencing work.

Any questions should be directed to your applicator or Nuralite technical support on 0800 Nuralite or 09 579 2046.

Things to note generally are;

Minimum Falls	1:30/2° for roofs
	1:40/1.5° for decks
	1:100/0.5° for gutters
	(Seek better than minimum falls if possible)

1. DECK SURFACE – PLYWOOD

- a. The top surface of the plywood should be sanded and plugged, to a minimum standard of C.
- b. Plywood substrate must be 17mm thick for roofs, 21mm thick for decks, and must be treated (CCA) H3.2 grade. Do not use LOSP-treated (light organic solvent preservative) or CuN treated (copper nitrate) plywood.
- c. Roofs and decks must be supported at 400mm centre maximum (including noggins & rafters), plywood sheets must be laid across supports and joints staggered (brick pattern), unless otherwise specified.
- d. Sheets must be glued and then fixed with Grade 316 Stainless Steel 10 gauge countersunk screws.

Screw edges every	150mm}	about 20mm from the edges
Screw centres every	200mm}	throughout the plywood sheet
- e. Joints butted, upstands filleted, edges arrised, drainage outflow details rebated.

2. DECK SURFACE – CONCRETE (TRUE IN PLANE, WOOD FLOAT SURFACE)

- a. Minimum cure 28 days. Curing membranes removed.
- b. Upstands filleted, edges arrised, drainage outflows rebated.

3. DECK SURFACE – ENERTHERM

- a. Ensure there are no gaps between sheets or around penetrations
- b. Enertherm fastened with the correct quantity of IKOfix Telescopic Fixing Plates and Fixing Screws (5 per sheet normally, 10 per sheet in Extra High wind zones).

Plywood Substrate

Project Name: _____

Form Completed by: _____

Company: _____

Area ready: _____

Applicator _____

CCA H3.2 treated plywood sheets used, 17mm thick for roofs, 21mm thick for decks.

Plywood sheets supported by joists and nogs at maximum 400mm centers in both directions, unless specified otherwise.

Sheets stagger lay (fully offset) with the face grain at right angles to the primary supports

All sheet edges supported by nogs, fixed 150mm on edges and 200mm through girth, edges butt-jointed with no gaps except at abutments.

Sheets glued in place and then fixed using 316 grade Stainless Steel 10 gauge countersunk screw fixings.

All decks and gutters have correct falls once installed.

Fillets installed to all internal junctions and neatly fitted with mitres neatly formed.

Rainwater outlets and overflow recesses formed to fit outlets rebated into the surface.

5mm clearances from all abutments, 5mm radius to all exposed edges.

Sharp edges and lips removed and cavities filleted. All joints flush.

Substrate dry, clean, firm and suitable condition for laying .

Notes

Signed:

Date:

Concrete Substrate

Project Name: _____

Form Completed by: _____

Company: _____

Area ready: _____

Applicator _____

Concrete cured and thoroughly dry over a minimum of 28 days.

Surface smooth and clean with correct drainage falls.

Cavities and cracks filled with repair mortar, flushed off and cured.

Concrete surface firm with any soft concrete or laitance removed.

Roof drains and overflow recesses formed to fit rebated outlets.

Mortar or Profili bitumen fillets to all upstands and smooth 5mm radius to all external edges

If terminating into a chase, pre-form the chase and ensure it's straight and 20mm deep.

Plinths formed for any exterior ventilation, fixtures or similar.

Substrate clean, firm and suitable condition for laying the Nuralite system s.

Notes

Signed:

Date:

Enertherm Substrate

Project Name: _____

Form Completed by: _____

Company: _____

Area ready: _____

Applicator _____

Dimond NPM 900 sheet installed with the narrow trough down

Fastening the NPM 900 sheet in the pan with 6 fasteners per purlin support.

Support purlins or rafters may be spaced at 2.3m at the end and 3.4m internally.

If using timber supports under NPM900, installed bitumen tape between timber and metal tray.

If specified, Vapour Barrier installed over substrate and wraps up onto Enertherm sheet.

Enertherm sheets stagger lay (fully offset) with correct falls and no ponding.

Confirm the substrate slope complies with specification.

Rainwater outlets and overflow recesses formed to fit outlets rebated into the surface.

Ensure only approved accessories to be used for drainage and venting.

Review penetrations to minimize number and complexity.

Any gaps in the insulation filled to prevent thermal bridging.

Material fastened with the correct quantity of IKOfix Telescopic Fixing Plates and Fixing Screws (5 per sheet normally, 10 per sheet in Extra High wind zones).

Plinths formed for any exterior ventilation, fixtures or similar.

Substrate clean, firm and suitable condition for laying the Nuralite systems.

Notes

Signed Builder: _____ Date: _____

Signed Applicator: _____ Date: _____